

12/9

Work Order ID 152835***152835***

Page 1

Tuesday, November 08, 2016 8:21:46 AM

Item ID: D350-567-141

Accept

N900040100

Setup

Start

NS1

Revision ID:

Stop

NS2

Item Name: Floor Window Close Out

Start Date: 11/28/2016 Start Qty: 1.00

1

Cust Item ID:

Required Date: 12/8/2016 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals:

Process Plan:

DAS

21

9-89

Date: NOV 08 2016

Tooling:

Date:

Run

Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

Draw Nbr

Revision Nbr

DSI 9590

F

DAS
21
9-89

16-11-23

100

Document Control

0.00

100

DOCUMENT CONTROL

DC

Memo

0.00

Doc.Control -USB or Paperwork

Photocopy bluefile & type labels per PPP D350-567-141 CHG004

DAS
27
9-89

DEC 07 2016

110

Pick Kit

0.00

110

Packaging

Memo

0.00

Packaging

DAS
28
9-89

NOV 23 2016

120

QC4- 100% Inspect kits for completeness

0.00

120

QC

Memo

0.00

Quality Control

DAS
27
9-89DAS
27
9-89

DEC 07 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="width:15%;">Skid-tube ☐</td> <td style="width:15%;">Cross tube ☐</td> <td style="width:15%;">Water Jet ☐</td> <td style="width:15%;">Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																						
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐																						
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐																						
Large Fab ☐	Composite ☐	Supplier ☐																							
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval																		
Description Work Order Deviation				Disposition																					
Root Cause		FAULT CATEGORY																							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐																				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐																				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐																				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐																				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐																				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐																				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐																				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐																				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐																				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐																				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____																							
Misidentified ☐	Past Due ☐																								

Work Order ID 152835

Tuesday, November 08, 2016 8:21:46 AM

152835

Page 2

Item ID: D350-567-141**Accept*****N900040100*****Setup Start*****NS1*****Revision ID:****Stop*****NS2*****Item Name:** Floor Window Close Out**Start Date:** 11/28/2016 **Start Qty:** 1.00***1*****Cust Item ID:****Required Date:** 12/8/2016 **Req'd Qty:** 1.00***1*****Customer:****Reference:****Approvals:****Process Plan:** _____**Date:** _____**Tooling:** _____**Date:** _____**Run Start*****NR1*****QC:** _____**Date:** _____**SPC (Y/N):** _____**Date:** _____**Stop*****NR2*****Sequence ID/
Work Center ID****Operation
Description****Set Up/
Run Hours****Tool ID****Tool #****Plan
Code****Accept
Qty****Reject
Qty****Reject
Number****Insp.
Stamp**

130

130

Packaging

Packaging

0.00

Memo

0.00

Packaging

Identify and pack for shipping as per PPP D350-567-141
Location:FG033*Sold*DAS
27
9-89

DEC 08 2016

140

140

QC

QC21- Final Inspection - Work Order Release

0.00

Memo

0.02

Quality Control

DAS
21
9-89

DEC 08 2016

DAS
21
9-89

DEC 08 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
3AC PS 85C				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : _____					

Picklist Print

Tuesday, November 08, 2016 8:21:49 AM

Page 1

Work Order ID: 152835

152835

Parent Item: D350-567-141

D350-567-141

Parent Item Name: Floor Window Close Out

Start Date: 11/28/2016

Required Date: 12/8/2016

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP REV:A 11.11.09 new issue DD verf:JLM IPP REV:B
12.01.23 AS PER ECN12-511 DD VERF:EC IPP REV:C 12.03.05
AS PER ECN12-537 DD VERF:EC IPP REV:D 13.04.01 AS PER
DSI9590 REV.E DD VERF:JLM IPP REV :E AS PER DSI9590 REV F JLM
VERIFIED BY:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D4434-047 *D4434-047* Cover Assembly		Manufactured	No				Each	6.0000	1	1			
									**	157525		NOV 23 2016	DAS 6 28 9-89
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				ST619				6					
					151545			6					
D3802-1 *D3802-1* Window Seal (\$ per foot)		Manufactured	No			110	f	37.5918	2	2			
									**				
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				ST416				37.591836					
				146267				1.591836					
				147067				1.5					
				147802				34.5					
D4434-041 *D4434-041* Fwd Bracket Assembly		Manufactured	No			110	Each	2.0000	1	1			
									**				
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				ST623				2					
				148930				2					

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐		OTHER : _____					

Picklist Print

Tuesday, November 08, 2016 8:21:49 AM

Page 2

Work Order ID: 152835

152835

Parent Item: D350-567-141

D350-567-141

Parent Item Name: Floor Window Close Out

Start Date: 11/28/2016

Required Date: 12/8/2016

Start Qty: 1.00

Required Qty: 1.00

D4435-045

Manufactured No

110 Each

2.0000

1 1

D4435-045

T/R Bellcrank Cover Assembly

**

DAS

6

9-89

NOV 23 2016

DAS

28

9-89

Location

Loc Qty

Loc Code

ST620

2

147625

2

D4435-9

Manufactured No

110 Each

13.0000

2 2

D4435-9

Bracket

**

NOV 23 2016

DAS

28

9-89

Location

Loc Qty

Loc Code

ST098

13

145909

13

D4436-041

Manufactured No

110 Each

1.0000

1 1

D4436-041

Aft Bracket Assembly

**

152253

DAS

6

9-89

NOV 23 2016

DAS

28

9-89

Location

Loc Qty

Loc Code

ST618

1

149659

1

D4441-1

Manufactured No

110 f

0.0001

2 2

D4441-1

Rubber Seal

**

151347

DAS

6

9-89

DEC 07 2016

DAS

28

9-89

Location

Loc Qty

Loc Code

ST422

0.0001

120932

0.0001

Tuesday, November 08, 2016 8:21:49 AM

Shop Packet Print

Page 2

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
							Completed By		
							Lead hand / Supervisor Approval Verification		
							QC / QA Coordinator Approval		
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

Picklist Print

Tuesday, November 08, 2016 8:21:49 AM

Page 3

Work Order ID: 152835

152835

Parent Item: D350-567-141

D350-567-141

Parent Item Name: Floor Window Close Out

Start Date: 11/28/2016

Required Date: 12/8/2016

Start Qty: 1.00

Required Qty: 1.00

AN3-3A Purchased No 110 Each 167.0000 7 7

AN3-3A

Bolt

**

NOV 23 2016

DAS

6

9-89

DAS

28

9-89

Location

Loc Qty

Loc Code

over003

50

m135865

50

ST350

117

m135466

64

m135566

3

m135672

50

DAS
27
9-89

AN525-10R6

Purchased No

AN525-10R6

Screw

110

Each

309.0000

2

2

**

NOV 23 2016

DAS

6

9-89

DAS

28

9-89

Location

Loc Qty

Loc Code

ST329

309

M134502

309

AN525-832R7

Purchased No

AN525-832R7

Screw

110

Each

80.0000

2

2

**

NOV 23 2016

DAS

6

9-89

DAS

28

9-89

Location

Loc Qty

Loc Code

GA

27

m134070

27

ST328

53

m134070

53

MS21042106

Purchased No

MS210421 06

Nut

110

Each

102.0000

7

7

**

NOV 23 2016

DAS

6

9-89

DAS

28

9-89

Location

Loc Qty

Loc Code

ST303

102

m135274

2

m135766

100

DAS
27
9-89

Tuesday, November 08, 2016 8:21:49 AM

Shop Packet Print

Page 3

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By _____ Lead hand / Supervisor Approval Verification _____ QC / QA Coordinator Approval _____		
Description Work Order Deviation				Disposition					
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

Picklist Print

Tuesday, November 08, 2016 8:21:49 AM

Page 4

Work Order ID: 152835

152835

Parent Item: D350-567-141

D350-567-141

Parent Item Name: Floor Window Close Out

Start Date: 11/28/2016

Required Date: 12/8/2016

Start Qty: 1.00

Required Qty: 1.00

MS21042L08

Purchased

No

110

Each

1,070.000

2

2

MS21042L08

Nut

Location

Loc Qty

Loc Code

GA

50

m135274

50

ST303

1020

m135672

20

m135766

200

m135948

300

m135978

500

NOV 23 2016

DAS 23
6
9-89

MS21042L3

Purchased

No

110

Each

2,231.000

5

5

MS21042L3

Nut

Location

Loc Qty

Loc Code

FP001

7

M130922

7

GA

210

m134360

108

m135135

102

OVER007

1200

m135945

600

M136044

600

ST303

814

m135530

211

m135600

3

m135767

600

NOV 23 2016

DAS 23
6
9-89

Tuesday, November 08, 2016 8:21:49 AM

Shop Packet Print

Page 4

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐							
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By _____ Lead hand / Supervisor Approval Verification _____ QC / QA Coordinator Approval _____				
Description Work Order Deviation				Disposition							
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐		FAULT CATEGORY		Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐		Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐		Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐	
		OTHER : ☐									

Picklist Print

Tuesday, November 08, 2016 8:21:49 AM

Page 5

Work Order ID: 152835

152835

Parent Item: D350-567-141

D350-567-141

Parent Item Name: Floor Window Close Out

Start Date: 11/28/2016

Required Date: 12/8/2016

Start Qty: 1.00

Required Qty: 1.00

MS21059L3

Purchased

No

110

Each

99.0000

2

2

MS21059L3

Nut Plate

NOV 23 2016

DAS
6
9-89

Location

Loc Qty

Loc Code

GA

29

M135603

29

ST301

70

M135704

10

M135774

60

2

MS35206-229

Purchased

No

110

Each

396.0000

7

7

MS35206-229

Screw

NOV 23 2016

DAS
6
9-89

Location

Loc Qty

Loc Code

ST271

396

M134070

46

M135603

350

7

NAS1149F0332P

Purchased

No

110

Each

2,822.000

12

12

NAS1149F0332P

Washer

NOV 23 2016

DAS
6
9-89

Location

Loc Qty

Loc Code

GA

276

m133709

276

ST260a

2000

m135948

2000

ST262

546

m135544

546

12

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : _____					

Picklist Print

Tuesday, November 08, 2016 8:21:49 AM

Page 6

Work Order ID: 152835

152835

Parent Item: D350-567-141

D350-567-141

Parent Item Name: Floor Window Close Out

Start Date: 11/28/2016

Required Date: 12/8/2016

Start Qty: 1.00

Required Qty: 1.00

NAS1149FN616P

Purchased

No

110

Each

82.0000

14

14

NAS1149FN616P

WASHER

DAS

6

9-89

NOV 23 2016

Location

Loc Qty

Loc Code

ST264

82

M135274

82

NAS1149FN816P

Purchased

No

110

Each

736.0000

2

2

NAS1149FN816P

WASHER

DAS

6

9-89

NOV 23 2016

Location

Loc Qty

Loc Code

ST263

736

117316

736

DAS
27
9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
							Completed By		
							Lead hand / Supervisor Approval Verification		
							QC / QA Coordinator Approval		

Root Cause				FAULT CATEGORY			
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐		
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐		
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐		
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐		
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐		
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐		
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐		
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐		
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐		
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐		
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____					
Misidentified ☐	Past Due ☐						

DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS D350-567 REV. E OR EARLIER
AND INSTRUCTIONS FOR CONTINUED AIRWORTHINESS ICA-D350-567 REV. 2 OR EARLIER
REF CANADIAN STC: SH92-18
FAA STC: SH989NE
FAA STC: SH990NE

1.0 Purpose

The purpose of this service instruction is to add the D350-567-141/-143/-145 Close-out Kits, which are intended for customers wishing to operate their aircraft with the interior floor window removed. The D350-567-141/-143/-145 Floor Window Close-out Kits provide a barrier around the interior and exterior vertical reference floor window to prevent objects from falling into the aircraft controls when the interior floor window is removed as shown in Figure 1. The -143 Kit is identical to the -141 Kit with the exception of the D4971-041 T/R Bellcrank Cover Assy which replaces the D4435-045 T/R Bellcrank Cover Assy on aircraft fitted with energy attenuating seats. The -145 Kit is similar to the -143 Kit but is only kit compatible with the AS350 B3e aircraft.

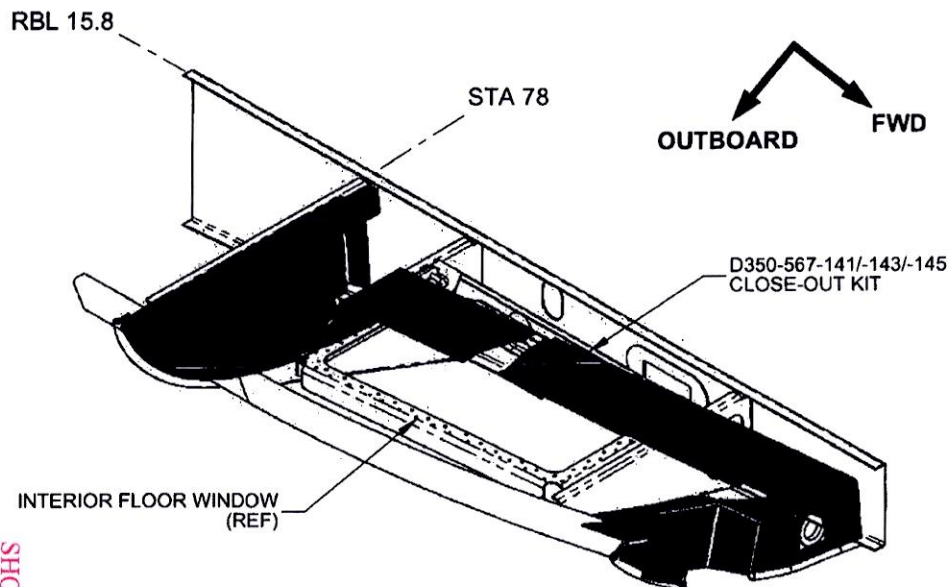


Figure 1. Floor Window Close-out Kit Installation

F	ADDED D4434-047 TO -141 KIT SEE PAR14-372.	AJS	15.01.12
E	ADD -143/-145 KITS	RF	14.03.20
E	CLARIFY FIGURES 3-12	VS	13.09.11
C	CORRECT TYPO NAS1149FN816P WAS NAS1149FN882P	RF	12.03.13
B	MS35206-229 WAS AN525-632R6; NAS1149FN616P (Qty 14) WAS (Qty 9); MS21042L06 (Qty 7) WAS (Qty 9); ADD AN525-832R7, NAS1149FN882P & MS21042L08	RF	12.02.22
A	NEW ISSUE	RF	12.01.09
REV.	DESCRIPTION	BY	DATE
DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. F
MFG. APPR.	N/A	DSI 9590	SHEET 1 OF 19
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	FLOOR WINDOW CLOSE-OUT KIT	NTS
DATE	15.01.12	COPYRIGHT © 2012 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED

BY: *[Signature]*
D. SHEPHERD (DE # 02)

DATE: 15.01.12
CERT. NO.: SH92-18
ISSUE NO.: 6

2.0 Parts List

Qty -141	Qty -143	Qty -145	Part Number	Description
X			D350-567-141	FLOOR WINDOW CLOSE-OUT KIT (REGULAR SEATS)
	X		D350-567-143	FLOOR WINDOW CLOSE-OUT KIT (ENERGY ATTENUATING SEATS)
		X	D350-567-145	FLOOR WINDOW CLOSE-OUT KIT (AS 350 B3e)
1	1	1	D3802-1-024	SEAL (24")
1	1		D4434-041	FWD BRACKET ASSEMBLY
1	1		D4434-047	COVER ASSEMBLY
1			D4435-045	T/R BELLCRANK COVER ASSEMBLY
2	2	2	D4435-9	BRACKET
1	1	1	D4436-041	AFT BRACKET ASSEMBLY
1	1	1	D4441-1-240	RUBBER SEAL (24")
		1	D4730-020-030	VELCRO STRIP
	1	1	D4971-041	T/R BELLCRANK COVER ASSEMBLY
		1	D5076-041	FWD BRACKET ASSEMBLY
7	5	5	AN3-3A	BOLT
2	2	2	AN525-10R6	SCREW
2	2	2	AN525-832R7	SCREW
		1	CB 200	3.5g ACRYLIC ADHESIVE
7	7	7	MS21042L06	NUT (OR MS21042-06)
2	2	2	MS21042L08	NUT (OR MS21042-08)
5	5	5	MS21042L3	NUT (OR MS21042-3)
2	2	2	MS21059L3	NUTPLATE
7	7	7	MS35206-229	SCREW
12	10	10	NAS1149F0332P	WASHER (AN960-10L)
14	14	14	NAS1149FN616P	WASHER (OR AN960-6L)
2	2	2	NAS1149FN816P	WASHER (OR AN960-8L)

△
F

3.0 Weight and Balance

The following is the net weight increase associated with the D350-567-141/-143/-145 Kits.

Installation	Weight	LATERAL		LONGITUDINAL	
		Arm	Moment	Arm	Moment
D350-567-141/-143/-145	3.9 lb	17.9 in	69.8 in-lb	65.5 in	255.5 in-lb
Floor Window Close-out Kit	1.77 kg	0.45 m	0.80 m-kG	1.66 m	2.94 m-kG

4.0 Installation Procedure

Notes:

- Figure 2 shows the general arrangement and installation of the D350-567-141/-143/-145 Close-out Kits. The procedure that follows outlines the step-by-step procedures for installing the kit with reference photos from the initial installation.
- In conjunction with this modification, it is acceptable to remove the interior floor windows as applicable. Note that the structural reinforcement around the window opening is still required.
 D350-567-115 - OK to remove D3295-041
 D350-567-031 - OK to remove D3212-1
 D350-567-011 - OK to remove D2214
 D350-567-021 - OK to remove D2951
- It is acceptable to drill/trim the D350-567-141/-143/-145 Close-out Kits as required to improve fit.

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED

BY: 
D. SHEPHERD (DE # 02)

DATE: 15.01.12
CERT. NO.: SH92-18
ISSUE NO.: 6

DESIGN	RF	DART AEROSPACE LTD	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. F
MFG. APPR.	N/A	DSI 9590	SHEET 2 OF 19
APPROVED		TITLE	SCALE
DE APPR.		FLOOR WINDOW CLOSE-OUT KIT	NTS
DATE 15.01.12		COPYRIGHT © 2012 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

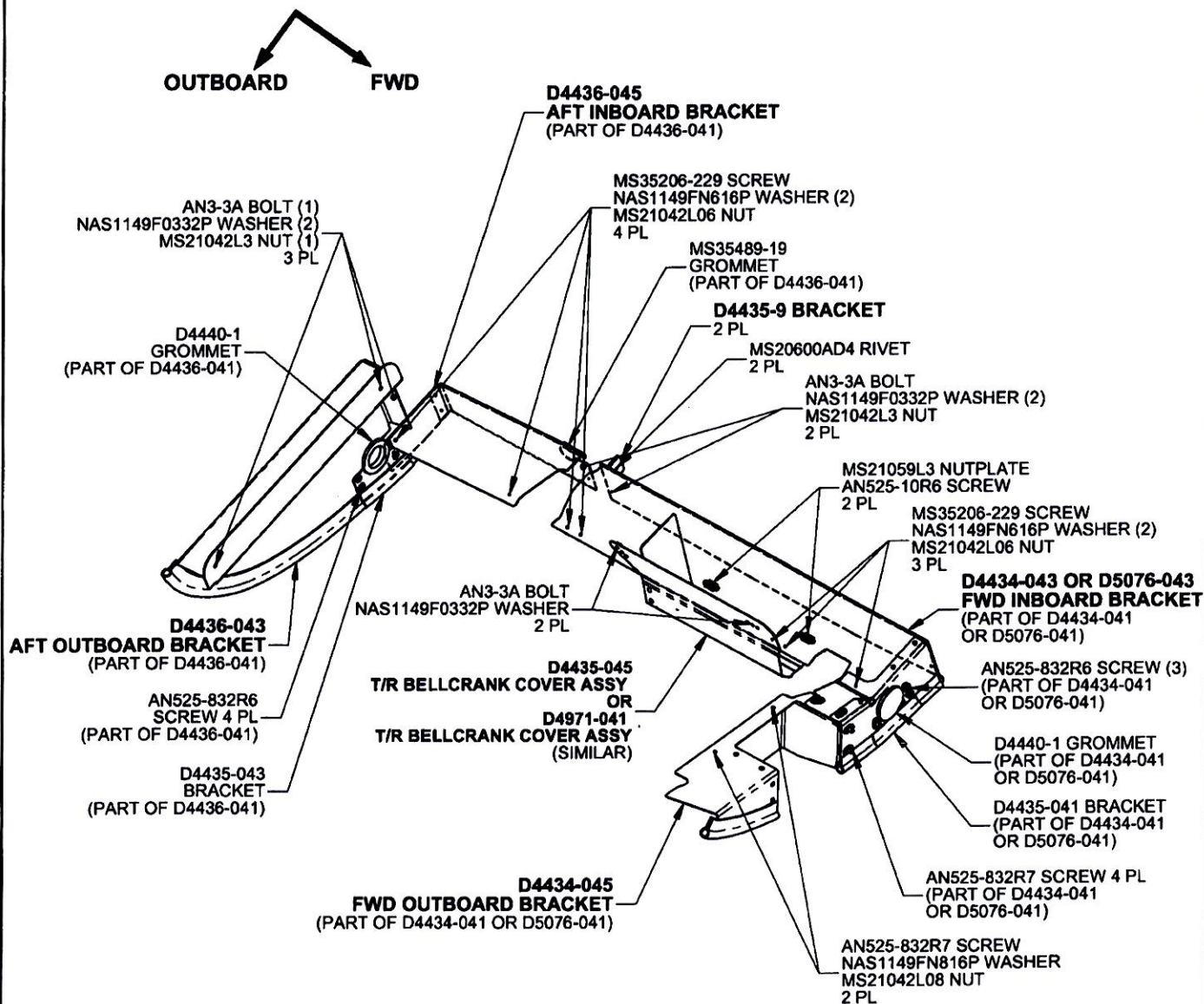


Figure 2. Floor Window Close-out Kit Installation

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED

BY: *D. Shepherd*
D. SHEPHERD (DE # 02)

DATE: 15.01.12
CERT. NO.: SH92-18
ISSUE NO.: 6

DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. F
MFG. APPR.	N/A	DSI 9590	SHEET 3 OF 19
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	FLOOR WINDOW CLOSE-OUT KIT	NTS
DATE	15.01.12	COPYRIGHT © 2012 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

4.1 Temporarily install D4436-043 Aft Outboard Bracket and D4436-045 Aft Inboard Bracket using clecos and/or cleco clamps. Before drilling holes:

- a) Position the D4436-043 Aft Outboard Bracket so the flange contacts the main beam as shown in Figure 3.
- b) Confirm that the D4436-043 Aft Outboard Bracket and beam angle are parallel as shown in Figure 4.

4.2 Temporarily install D4434-043/D5076-043 Fwd Inboard Bracket and D4434-045 Fwd Outboard Bracket using clecos and cleco clamps. Confirm there is no contact between D4436-045 Aft Inboard Bracket and D4434-043 /D5076-043 Fwd Inboard Bracket and main beam gusset as shown in Figure 5.

F 4.3 For -141 installations, if aircraft is equipped with Collective Circuit Breaker Board box, trim D4434-043 Fwd Inboard Bracket as shown in Figure 14. Note: Confirm the D4434-047 Bracket fits over the Collective Circuit Breaker Board box. Adjust opening as required.

4.4 For -143 installations, if aircraft is equipped with Collective Circuit Breaker Board box, trim D4434-043 Fwd Inboard Bracket as shown in Figure 14. Install D4971-041 T/R Bellcrank cover as shown in Figure 13b. Note: Confirm the D4434-047 Bracket fits over the Collective Circuit Breaker Board box. Adjust opening as required.

4.5 For -145 installations, if aircraft is equipped with Collective Circuit Breaker Board box, use D5076-043 Fwd Inboard Bracket as shown in Figure 13c. Install D4971-041 T/R Bellcrank cover as shown in Figure 13c. Note: Confirm the D5076-3 Cover fits over the Collective Circuit Breaker Board box. Adjust opening as required.

4.6 Drill out rivets holding plastic wire bundle stand offs. Transfer drill $\varnothing 0.144$ holes to D4436-045 Aft Inboard Bracket per Figure 6. Transfer drill $2 \times \varnothing 0.144$ holes to D4434-043/D5076-043 Fwd Inboard Bracket per Figure 7. Transfer drill $2 \times \varnothing 0.144$ holes for D4434-043/D5076-043 Fwd Inboard Bracket per Figure 8. Before drilling confirm the D4434-043/D5076-043 and D4436-045 brackets are flush with outboard edge of main beam flange. Assemble D4436-045 Aft Inboard Bracket and D4434-043/D5076-043 Fwd Inboard Bracket and wire bundle stand offs to main beam flange using MS35206-229 screw, NAS1149FN616P washer and MS21042L06 nut.

4.7 Install D4436-043 Aft Outboard Bracket using AN3-3A bolt and NAS1149F0332P washer and MS21042L3 nut per Figure 9.

4.8 Remove 2 rivets holding RH heating plastic stand off as shown in Figure 10. Position the D4435-9 Brackets on the in/outboard sides of the cross beam and transfer drill $2 \times \varnothing 0.129$ holes from crossbeam to both D4435-9 Brackets. Install D4435-9 Brackets and RH heating plastic stand off using MS20600AD4 rivets or equivalent.

4.9 Drill a pilot hole from D4435-9 Bracket to the D4434-043/D5076-043 Fwd Inboard Bracket and D4436-045 Aft Inboard Bracket and open to $\varnothing 0.191$. Install AN3-3A bolt, NAS1149F0332P washer and MS21042L3 nut as shown in Figure 10. Be sure to maintain edge distance.

4.10 Transfer drill $2 \times \varnothing 0.144$ holes from crossbeam to D4434-045 Fwd Outboard Bracket if holes exist in crossbeam. If holes do not exist, drill $2 \times \varnothing 0.144$ holes at either end of D4434-045 bracket as shown in Figure 11. Install AN525-832R7 screws, NAS1149FN816P washer and MS21042L08 nuts.

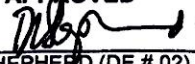
4.11 FOR D350-567-141 KIT

a) Align D4435-045 T/R Bellcrank Cover Assy with existing holes in RH seat track lower frame and temporarily install using clecos and/or cleco clamps as shown in Figure 12a.

b) Transfer drill $2 \times \varnothing 0.098$ holes from D4435-045 T/R Bellcrank Cover Assy to D4434-043 Fwd Inboard Bracket. Open holes to $\varnothing 0.191$ and install MS21059L3 nut plate into D4434-043 Fwd Inboard Bracket as shown in Figure 12a and Figure 13a. Install D4435-045 T/R Bellcrank Cover Assy using AN525-10R6 screw, AN3-3A bolt and NAS1149F0332P washer per Figure 12a and Figure 13a.

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED

BY: 
D. SHEPHERD (DE # 02)

DATE: 15.01.12
CERT. NO.: SH92-18
ISSUE NO.: 6

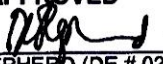
DESIGN	RF	DART AEROSPACE LTD	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. F
MFG. APPR.	N/A	DSI 9590	SHEET 4 OF 19
APPROVED		TITLE	SCALE
DE APPR.		FLOOR WINDOW CLOSE-OUT KIT	NTS
DATE	15.01.12	COPYRIGHT © 2012 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

4.12 FOR D350-567-143/-145 KIT

- a) Remove the D4972-041 Side Plate Assy from the D4971-041 T/R Bellcrank Cover Assy and retain fasteners.
 - b) Align D4971-1 T/R Bellcrank Cover with existing holes in RH seat track lower frame and temporarily install using clecos and/or cleco clamps as shown in Figure 12b.
 - c) Bond D4730-020-030 Velcro to back of D4971-1 T/R Bellcrank Cover as shown in Figure 12b using CB 200 adhesive.
 - d) Transfer drill 2 x $\varnothing 0.098$ holes from D4971-1 Cover Plate to D4434-043/D5076-043 Fwd Inboard Bracket. Open holes to $\varnothing 0.191$ and install MS21059L3 nut plate into D4434-043/D5076-043 Fwd Inboard Bracket as shown in Figure 13b/13c. Install D4971-1 Cover Plate using AN525-10R6 screws and D4730-020-030 Velcro per Figure 12b and Figure 13b/13c.
 - e) Re-install the D4972-041 Side Plate Assy using the retained fasteners.
- 4.13 The D4440-1 grommets are provided to facilitate the routing of wiring harness thru the close-out kit as required. The wiring harness should be secure to the aircraft structure per AC 43.13.13-1B or AS350 Chapter 20.02.01.
- 4.14 Use the D3802-1-024 Seal to fill gaps between the brackets and the cowlings that are larger than 0.25 inch.
- 4.15 Perform travel/interference check of the flight controls to ensure there is no interference and all controls still have full travel.
- 4.16 Ensure there is a gap between the components of the D350-567-141/-143/-145 Close-out Kit and the aircraft structure so that the Close-out Kit does not chafe, interfere, or cause damage to the surrounding aircraft structure. In areas where the D350-567-141/-143/-145 Close-out Kit may contact the aircraft structure, protect from abrasion using chafing tape or a layer Proseal 890 or MIL-S-8802 class B2 sealant or equivalent as required.

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED

BY: 
D. SHEPHERD (DE # 02)

DATE: 15.01.12
CERT. NO.: SH92-18
ISSUE NO.: 6

DESIGN	RF	DART AEROSPACE LTD	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. F
MFG. APPR.	N/A	DSI 9590	SHEET 5 OF 19
APPROVED		TITLE	SCALE
DE APPR.		FLOOR WINDOW CLOSE-OUT KIT	NTS
DATE	15.01.12	COPYRIGHT © 2012 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

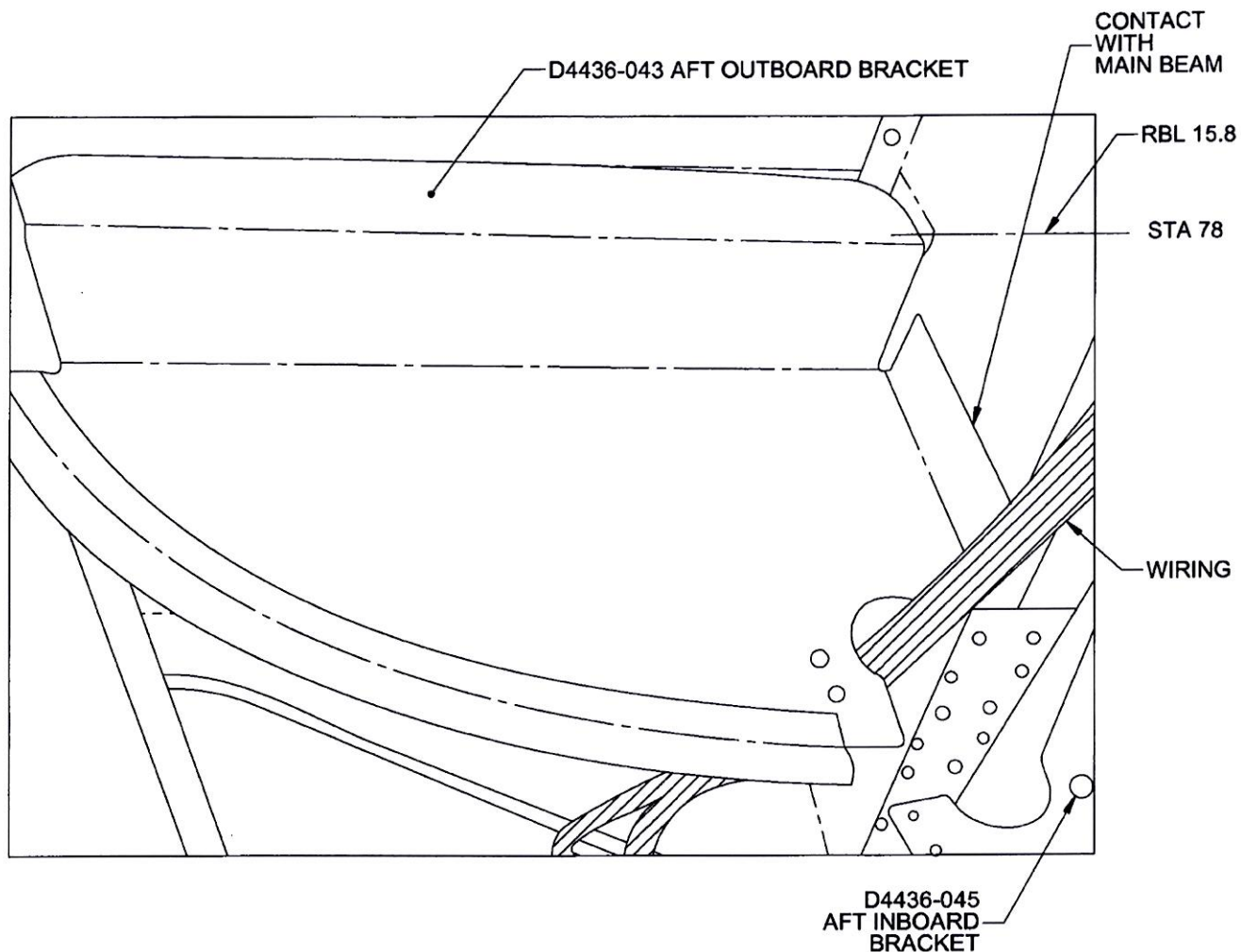


Figure 3. D4436-043 Aft Outboard Bracket Installation

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED

BY: *[Signature]*
D. SHEPHERD (DE # 02)

DATE: 15.01.12
CERT. NO.: SH92-18
ISSUE NO.: 6

DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED	<i>[Signature]</i>	DRAWING NO. DSI 9590	REV. F
MFG. APPR.	N/A	SHEET 6 OF 19	
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	FLOOR WINDOW CLOSE-OUT KIT	NTS
DATE	15.01.12	COPYRIGHT © 2012 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

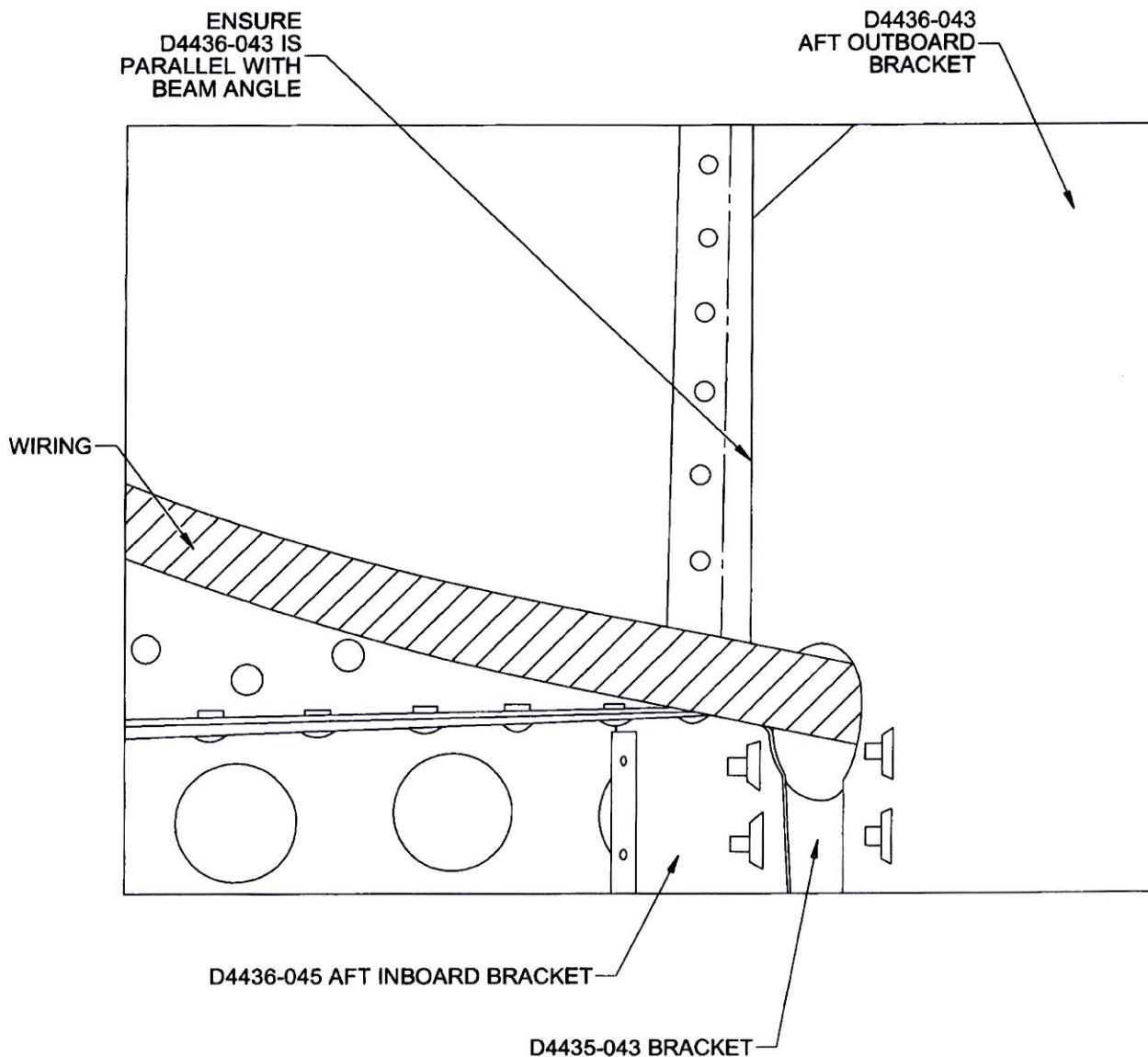


Figure 4. D4436-043 & D4435-043 Brackets Installation

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED

BY: [Signature]
D. SHEPHERD (DE # 02)

DATE: 15.01.12
CERT. NO.: SH92-18
ISSUE NO.: 6

DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED	[Signature]	DRAWING NO.	REV. F
MFG. APPR.	N/A	DSI 9590	SHEET 7 OF 19
APPROVED	[Signature]	TITLE	SCALE
DE APPR.	[Signature]	FLOOR WINDOW CLOSE-OUT KIT	NTS
DATE	15.01.12	COPYRIGHT © 2012 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

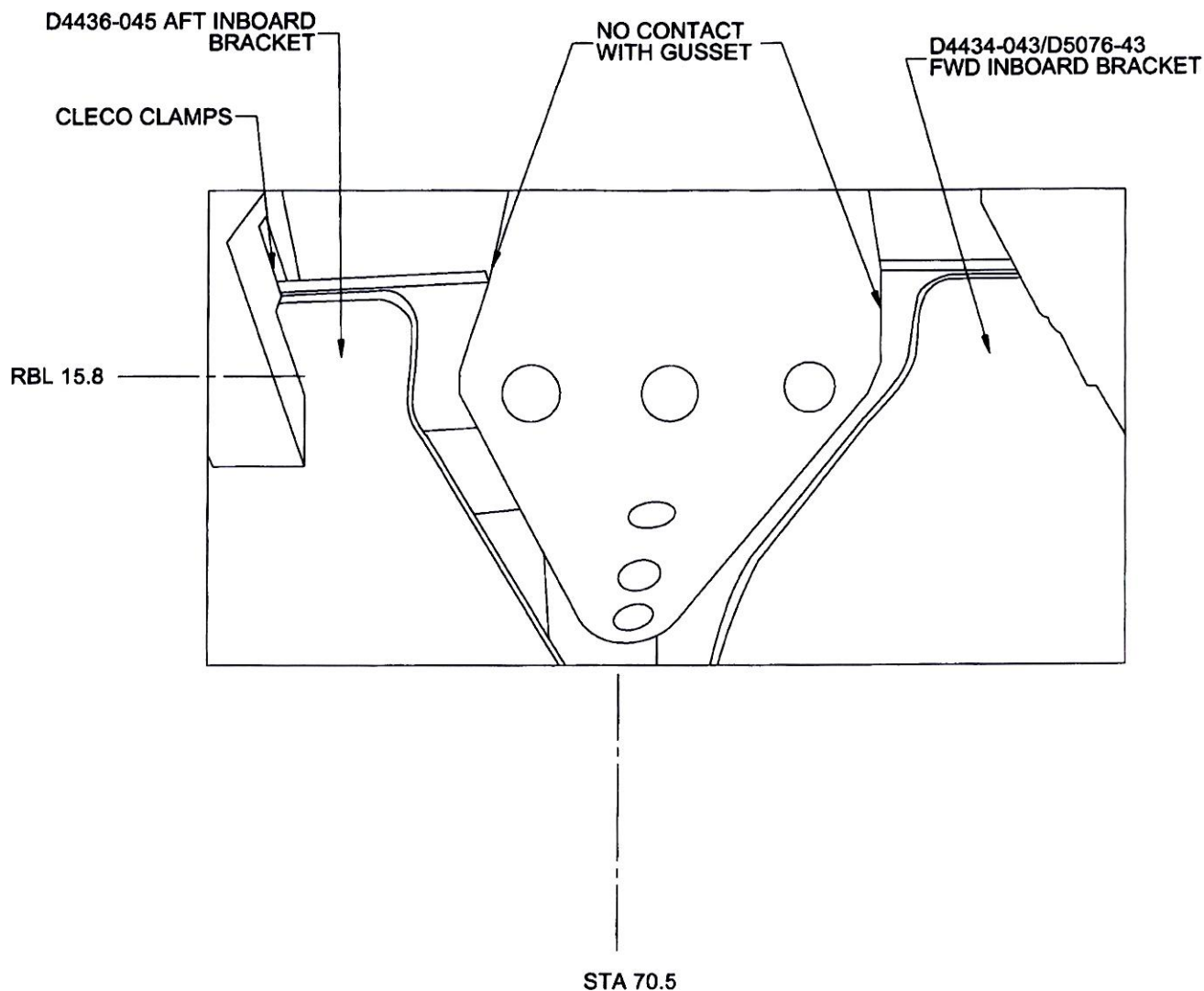


Figure 5. D4436-045 & D4434-043/D5076-043 Brackets Installation

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED

BY: *[Signature]*
D. SHEPHERD (DE # 02)

DATE: 15.01.12
CERT. NO.: SH92-18
ISSUE NO.: 6

DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED	<i>[Signature]</i>	DRAWING NO. DSI 9590	REV. F
MFG. APPR.	N/A	SHEET 8 OF 19	
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	FLOOR WINDOW CLOSE-OUT KIT	NTS
DATE	15.01.12	COPYRIGHT © 2012 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

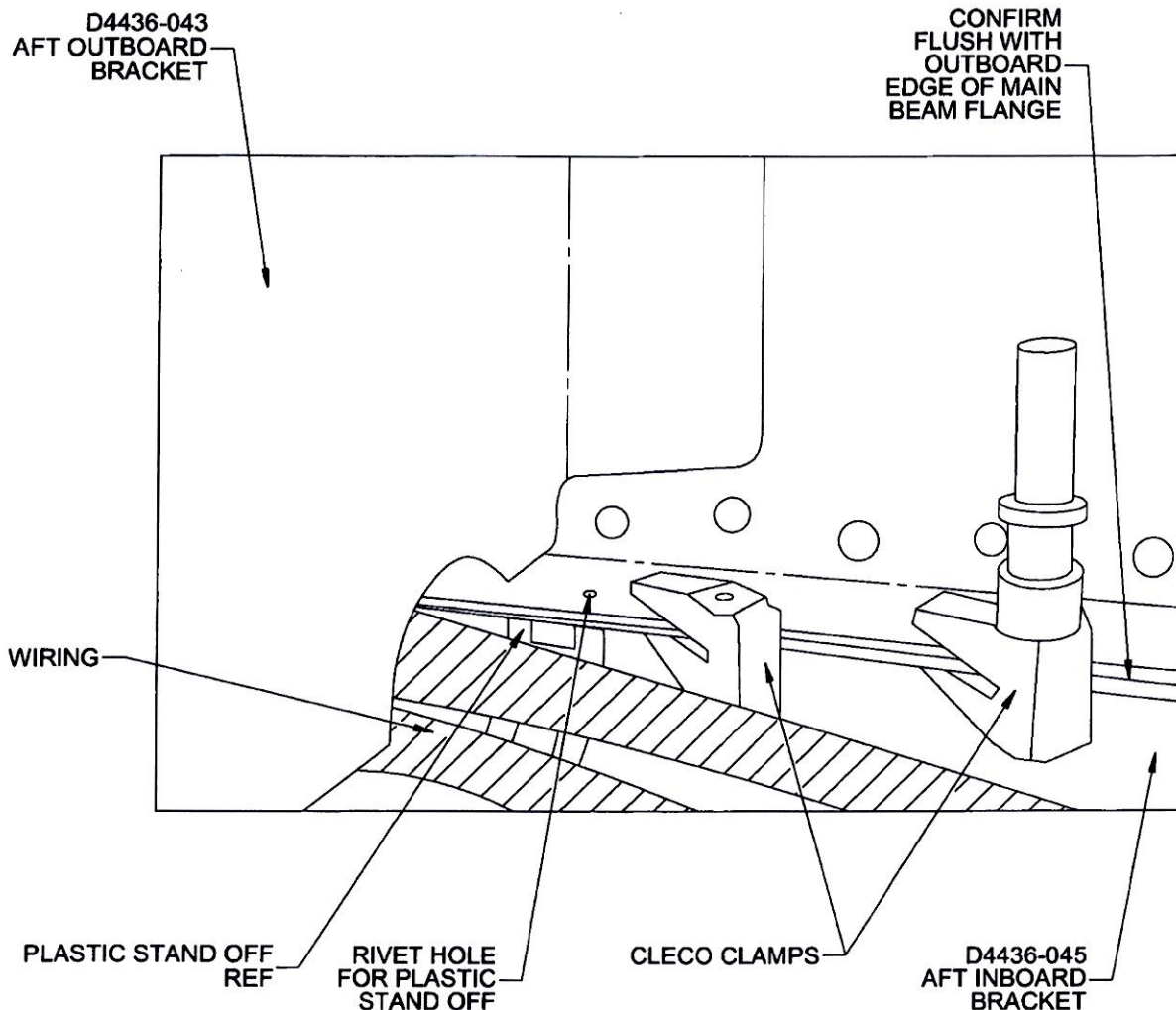


Figure 6. D4436-043 & D4436-045 Brackets Installation

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED

BY: *[Signature]*
D. SHEPHERD (DE # 02)

DATE: 15.01.12
CERT. NO.: SH92-18
ISSUE NO.: 6

DESIGN	RF	DART AEROSPACE LTD	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. F
MFG. APPR.	N/A	DSI 9590	SHEET 9 OF 19
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	FLOOR WINDOW CLOSE-OUT KIT	NTS
DATE	15.01.12	COPYRIGHT © 2012 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

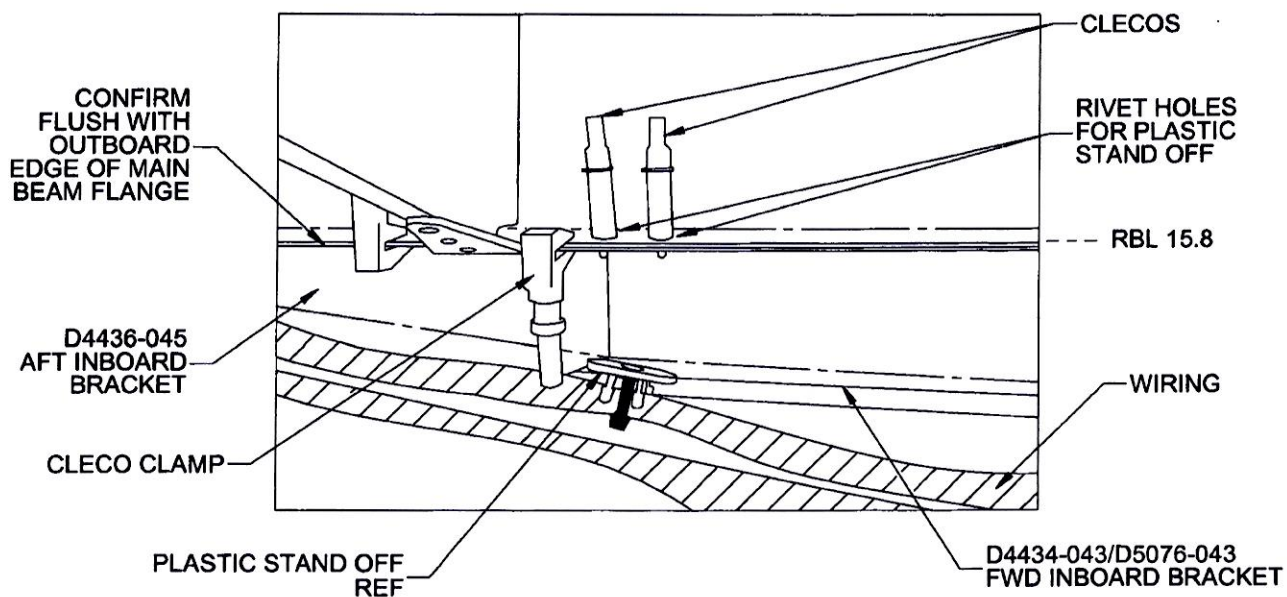


Figure 7. D4434-043/D5076-043 & D4436-045 Brackets Installation

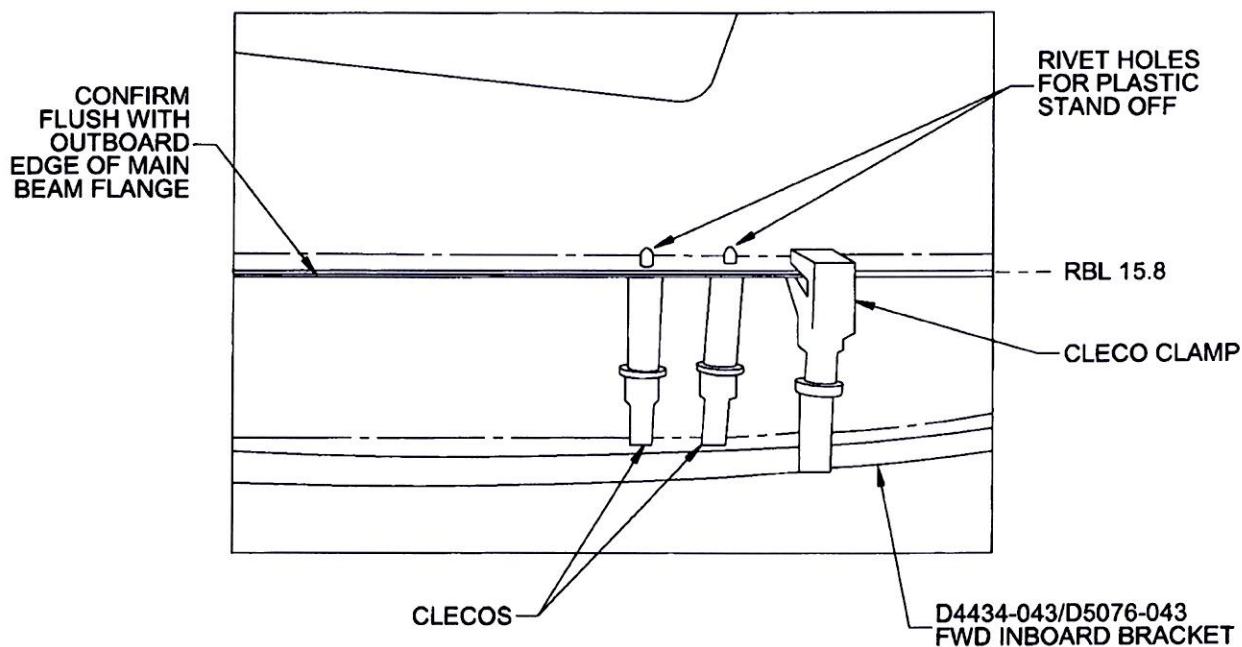


Figure 8. D4434-043/D5076-043 Fwd Inboard Bracket Installation

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED

BY: *[Signature]*
D. SHEPHERD (DE # 02)

DATE: 15.01.12
CERT. NO.: SH92-18
ISSUE NO.: 6

DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. F
MFG. APPR.	N/A	DSI 9590	SHEET 10 OF 19
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	FLOOR WINDOW CLOSE-OUT KIT	NTS
DATE	15.01.12	COPYRIGHT © 2012 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

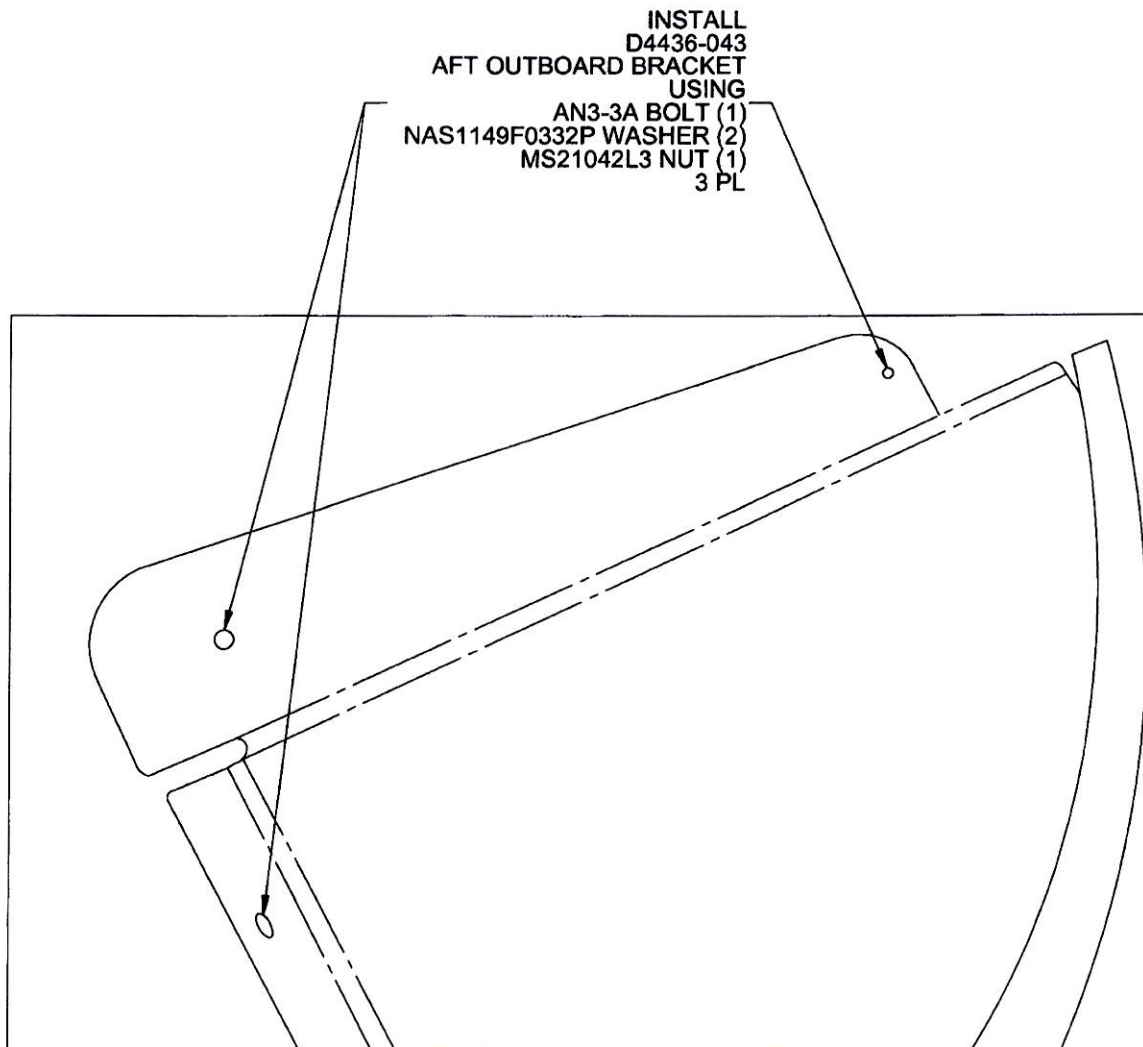


Figure 9. D4436-043 Aft Outboard Bracket Installation

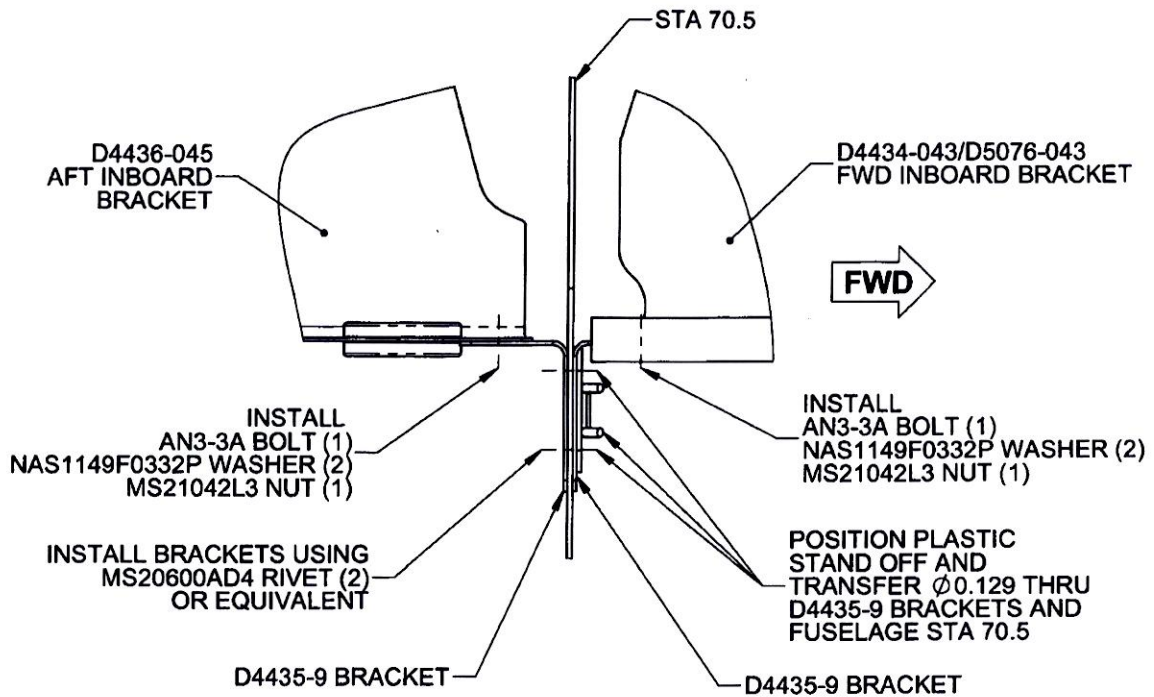
CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED

BY: 
D. SHEPHERD (DE # 02)

DATE: 15.01.12
CERT. NO.: SH92-18
ISSUE NO.: 6

DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	A.S		
CHECKED		DRAWING NO.	REV. F
MFG. APPR.	N/A	DSI 9590	SHEET 11 OF 19
APPROVED		TITLE	SCALE
DE APPR.		FLOOR WINDOW CLOSE-OUT KIT	NTS
DATE	15.01.12	COPYRIGHT © 2012 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	



LOOKING UP AT STA 70.5

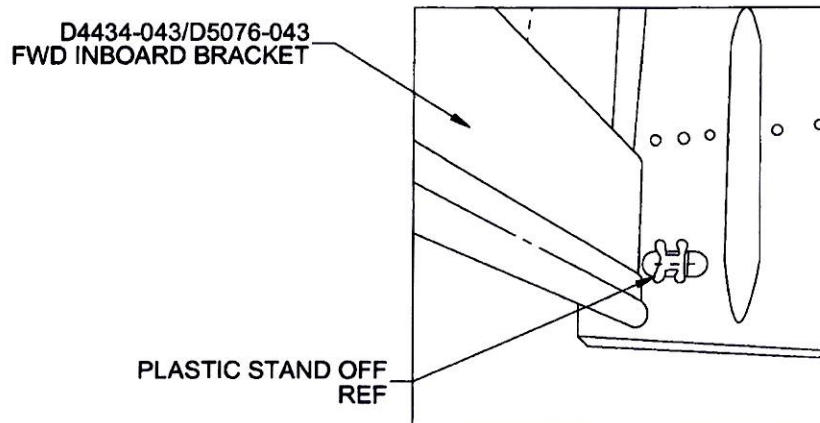


Figure 10. D4434-043/D5076-043 and D4435-9 Brackets Installation

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED

BY: *[Signature]*
D. SHEPHERD (DE # 02)

DATE: 15.01.12
CERT. NO.: SH92-18
ISSUE NO.: 6

DESIGN	RF	DART AEROSPACE LTD	
DRAWN	AUS	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. F
MFG. APPR.	N/A	DSI 9590	SHEET 12 OF 19
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	FLOOR WINDOW CLOSE-OUT KIT	NTS
DATE	15.01.12	COPYRIGHT © 2012 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

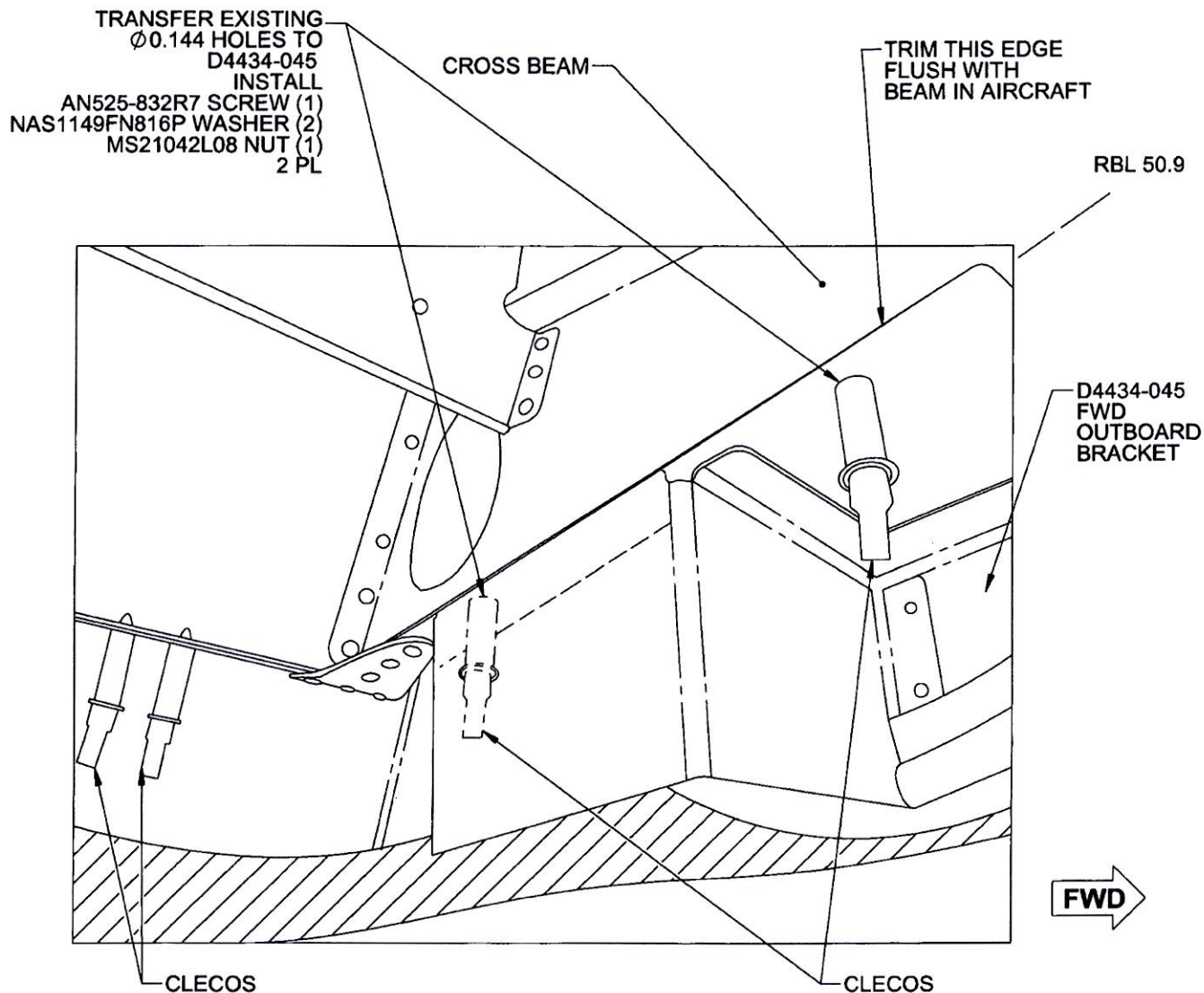


Figure 11. D4434-045 Bracket Installation

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED

BY: *[Signature]*
D. SHEPHERD (DE # 02)

DATE: 15.01.12
CERT. NO.: SH92-18
ISSUE NO.: 6

DESIGN	RF	DART AEROSPACE LTD	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. F
MFG. APPR.	N/A	DSI 9590	SHEET 13 OF 19
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	FLOOR WINDOW CLOSE-OUT KIT	NTS
DATE	15.01.12	COPYRIGHT © 2012 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

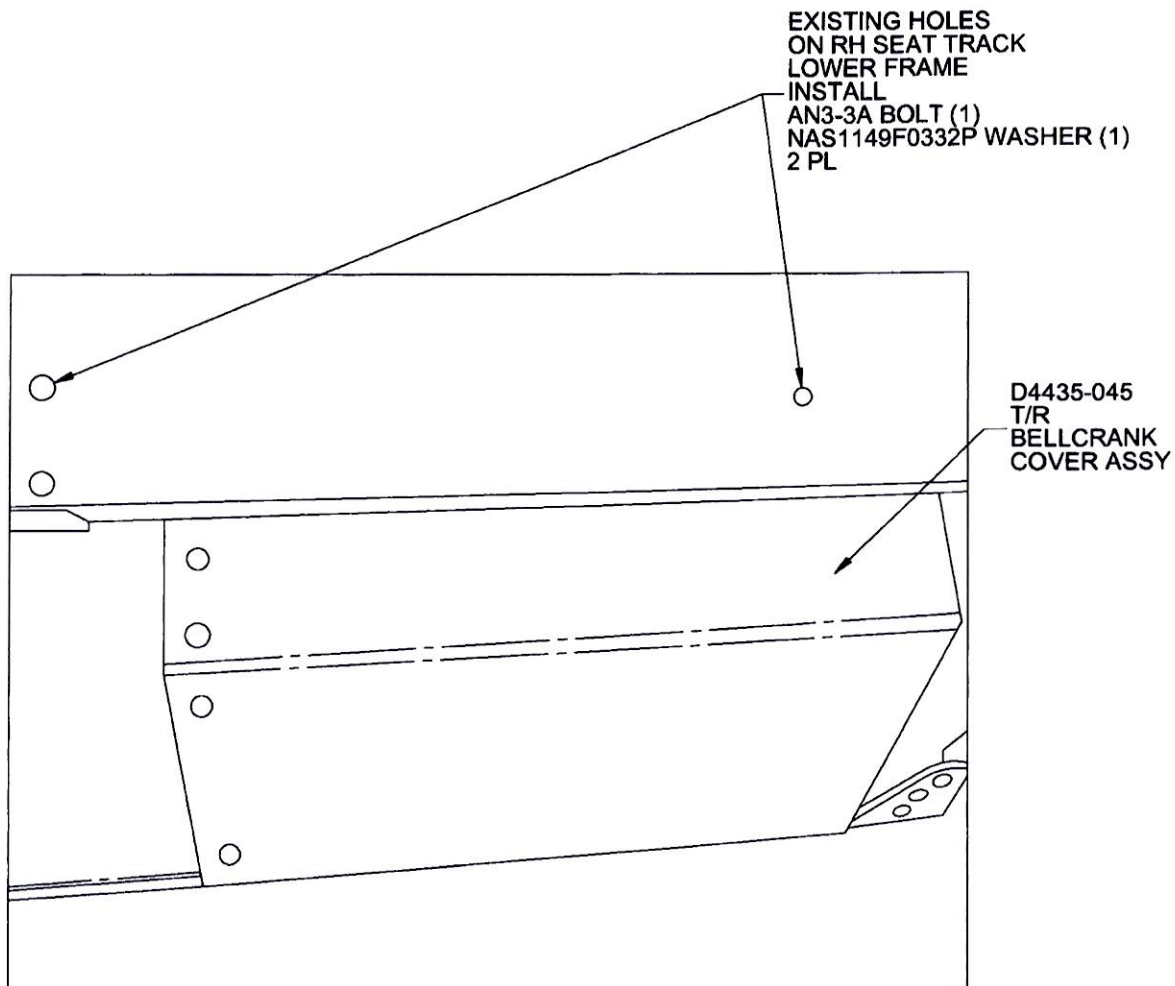


Figure 12a. D4435-045 T/R Bellcrank Cover Installation (-141)

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED

BY: *[Signature]*
D. SHEPHERD (DE # 02)

DATE: 15.01.12
CERT. NO.: SH92-18
ISSUE NO.: 6

DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. F
MFG. APPR.	N/A	DSI 9590	SHEET 14 OF 19
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	FLOOR WINDOW CLOSE-OUT KIT	NTS
DATE	15.01.12	COPYRIGHT © 2012 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

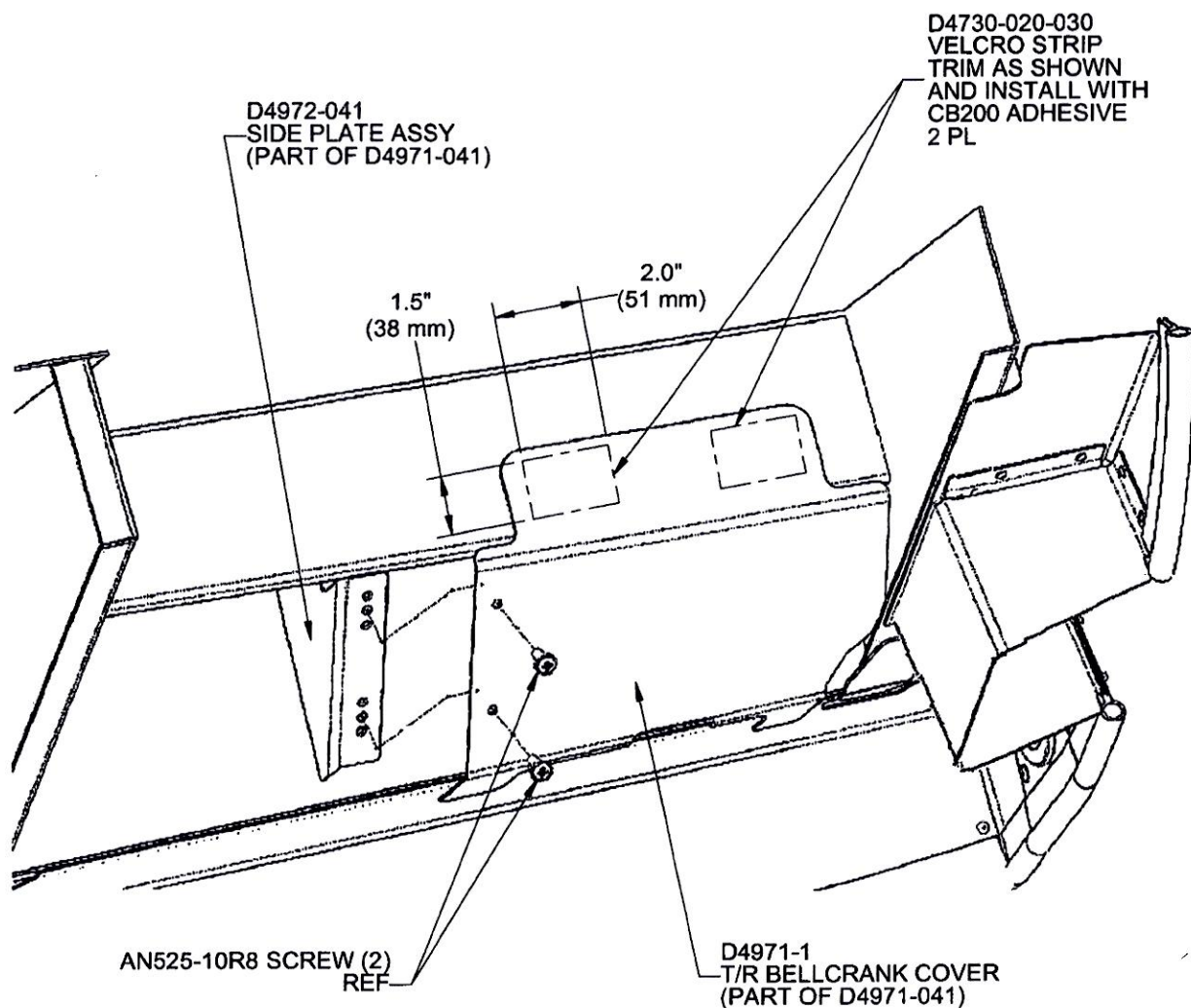


Figure 12b. D4971-041 T/R Bellcrank Cover Assy Installation (-143/-145)

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED

BY: *[Signature]*
D. SHEPHERD (DE # 02)

DATE: 15.01.12
CERT. NO.: SH92-18
ISSUE NO.: 6

DESIGN	RF	DART AEROSPACE LTD	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. F
MFG. APPR.	N/A	DSI 9590	SHEET 15 OF 19
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	FLOOR WINDOW CLOSE-OUT KIT	NTS
DATE	15.01.12	COPYRIGHT © 2012 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

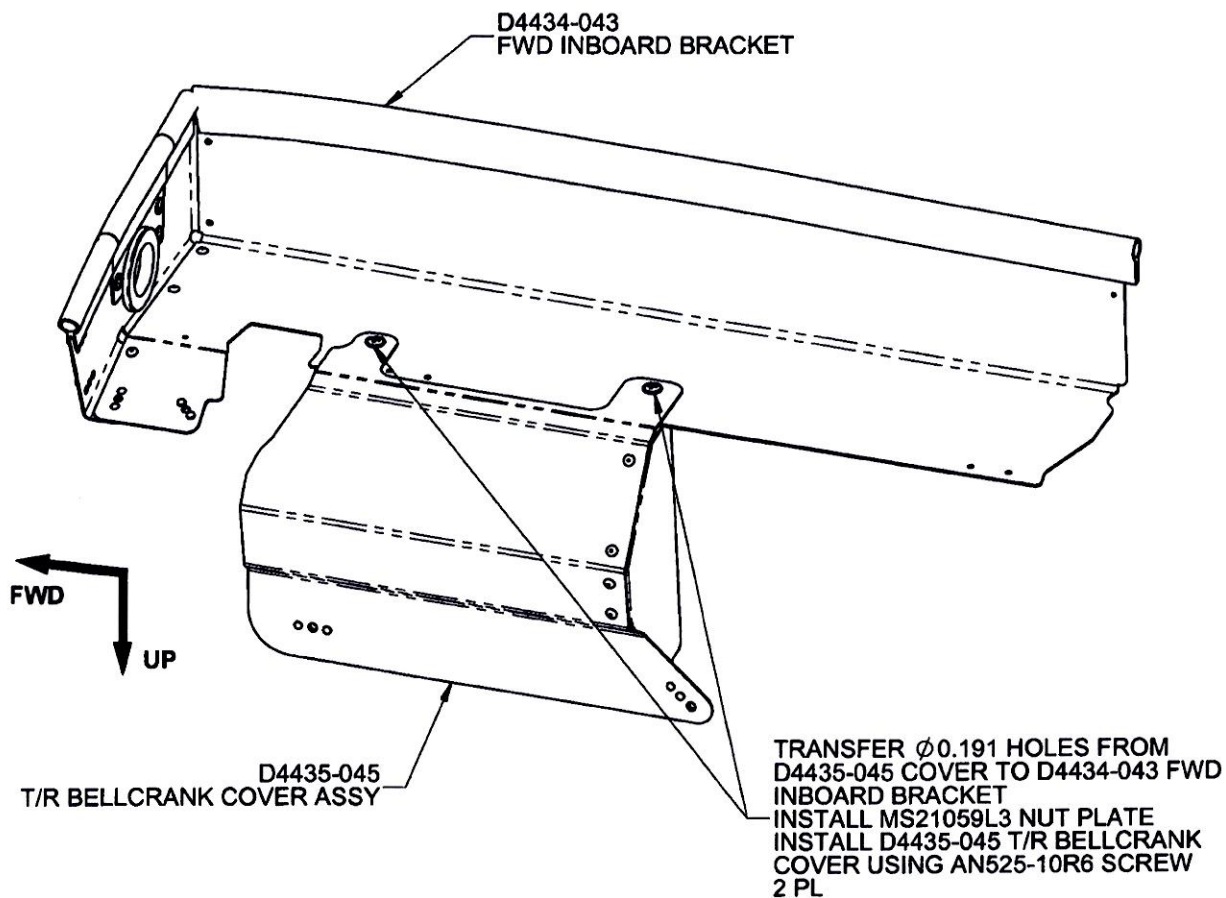


Figure 13a. D4435-045 Cover Installation (-141 ONLY)

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED

BY: *D. Shepherd*
D. SHEPHERD (DE # 02)

DATE: 15.01.12
CERT. NO.: SH92-18
ISSUE NO.: 6

DESIGN	RF	DART AEROSPACE LTD	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. F
MFG. APPR.	N/A	DSI 9590	SHEET 16 OF 19
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	FLOOR WINDOW CLOSE-OUT KIT	NTS
DATE	15.01.12	COPYRIGHT © 2012 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

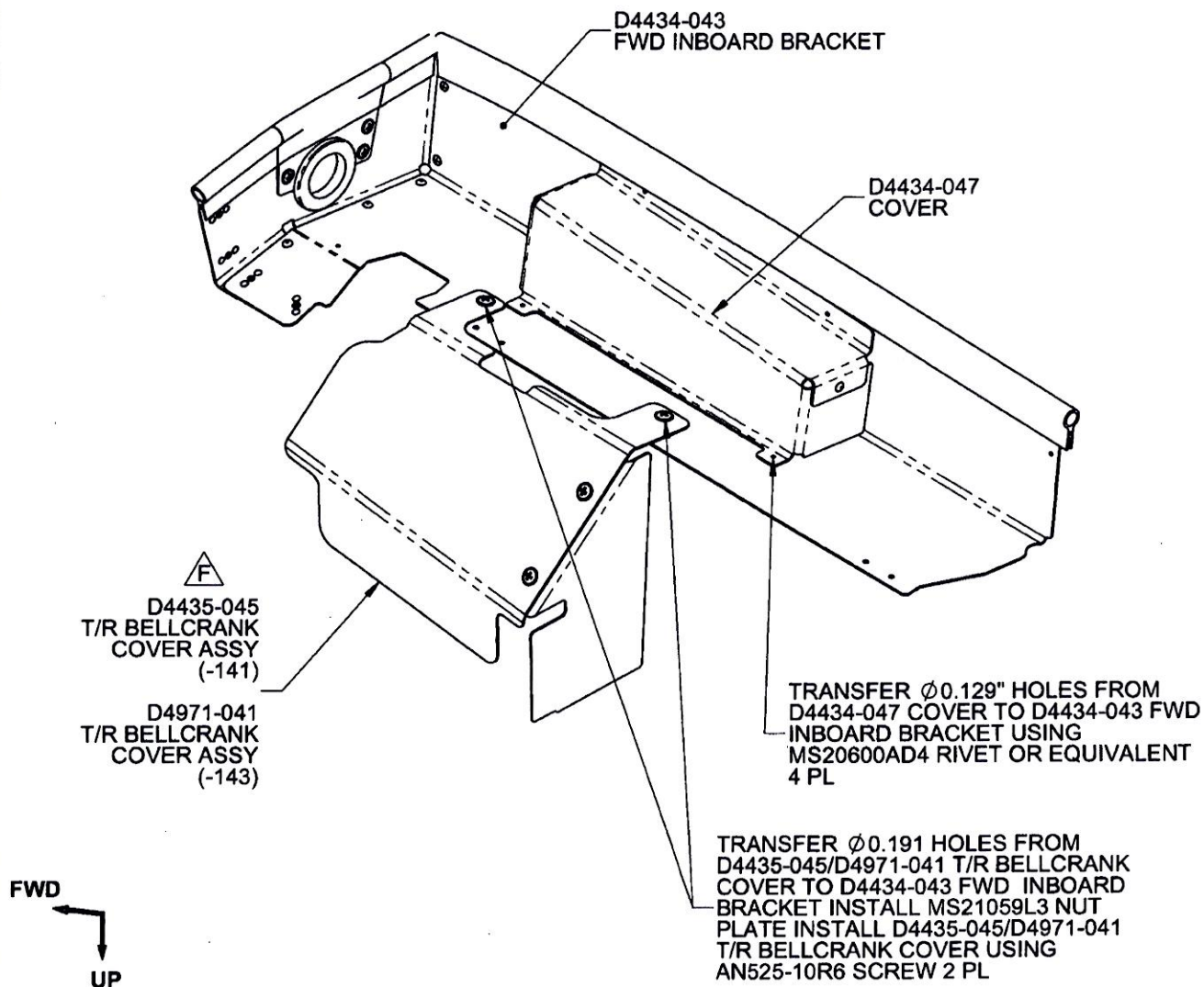


Figure 13b. D4971-041/D4435-045 & D4434-047 Cover Installation
(D4434-047 is Optional on -141)



CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED

BY: *[Signature]*
D. SHEPHERD (DE # 02)

DATE: 15.01.12
CERT. NO.: SH92-18
ISSUE NO.: 6

DESIGN	RF	DART AEROSPACE LTD	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. F
MFG. APPR.	N/A	DSI 9590	SHEET 17 OF 19
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	FLOOR WINDOW CLOSE-OUT KIT	NTS
DATE	15.01.12	COPYRIGHT © 2012 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

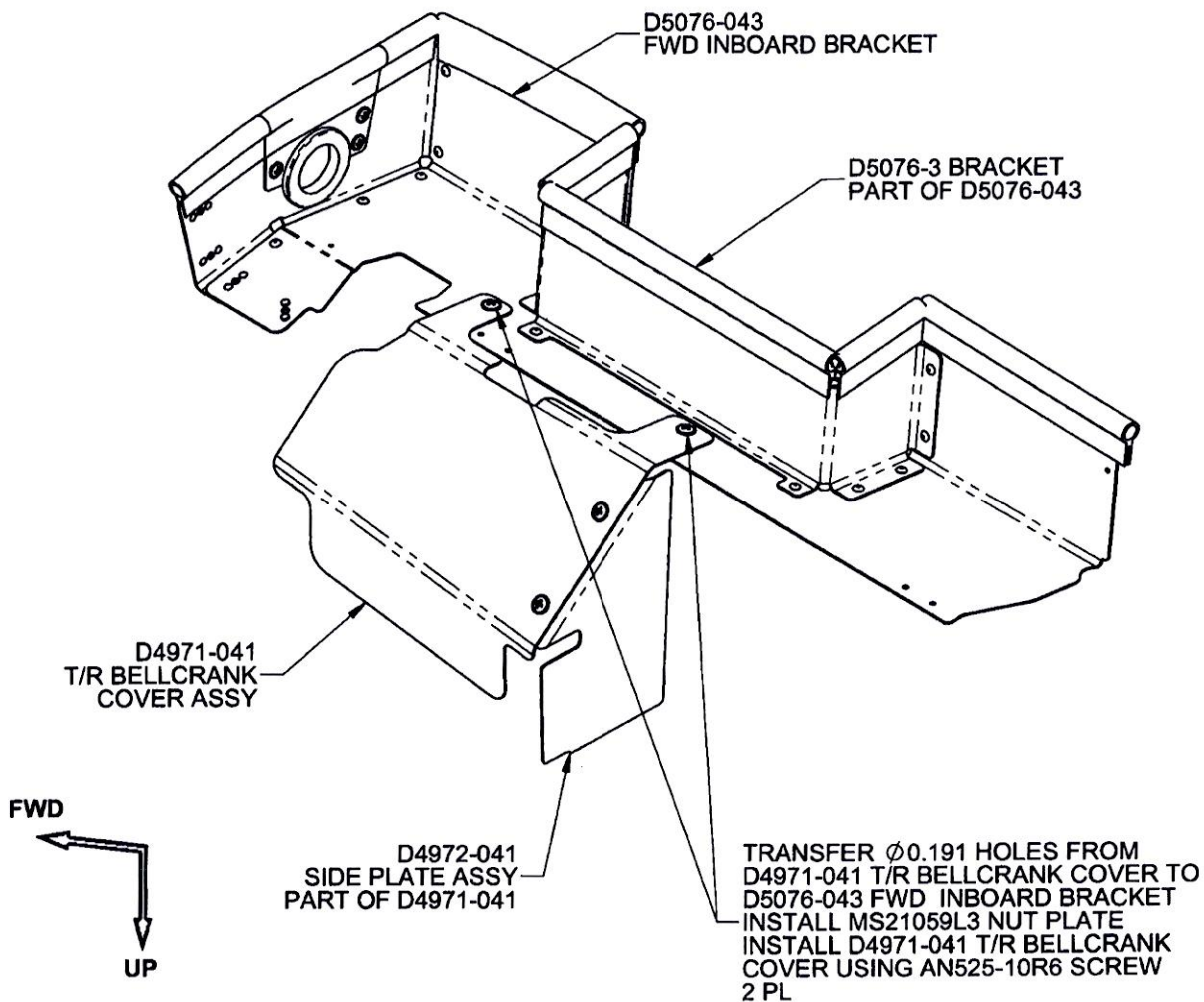


Figure 13c. D4971-041 INSTALLATION INTO D5076-043 (-145 ONLY)

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED

BY: *[Signature]*
D. SHEPHERD (DE # 02)

DATE: 15.01.12
CERT. NO.: SH92-18
ISSUE NO.: 6

DESIGN	RF	DART AEROSPACE LTD	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. F
MFG. APPR.	N/A	DSI 9590	SHEET 18 OF 19
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	FLOOR WINDOW CLOSE-OUT KIT	NTS
DATE	15.01.12	COPYRIGHT © 2012 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

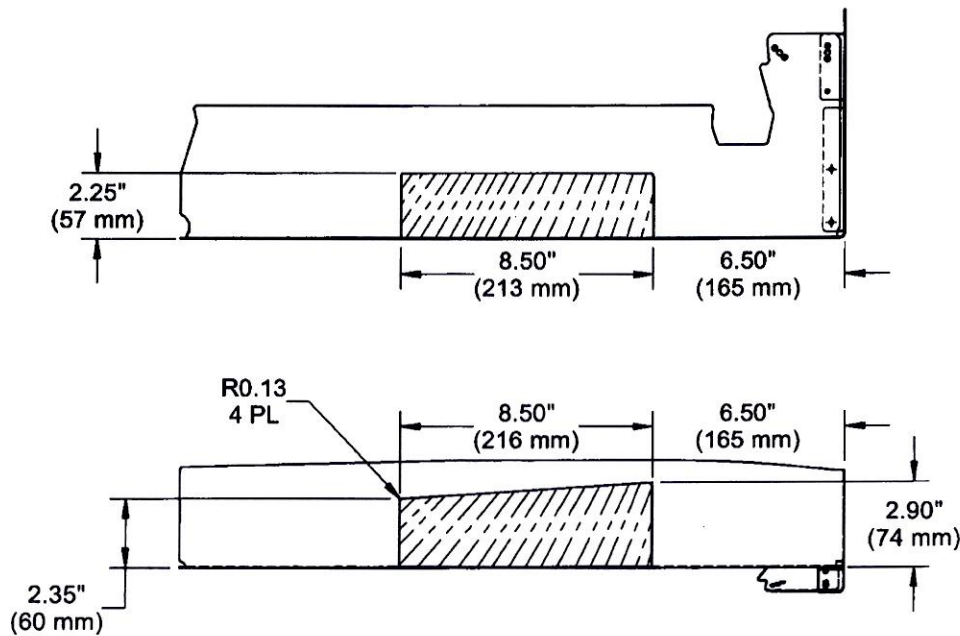
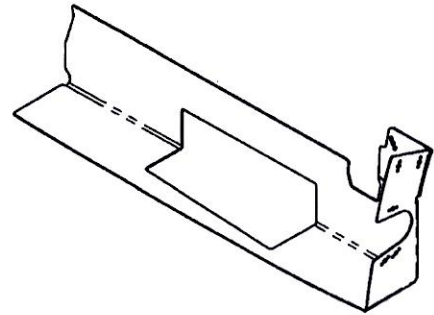


Figure 14. D4434-043 Fwd Inboard Bracket Cutout

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED

BY: *[Signature]*
D. SHEPHERD (DE # 02)

DATE: 15.01.12
CERT. NO.: SH92-18
ISSUE NO.: 6

DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. F
MFG. APPR.	N/A	DSI 9590	SHEET 19 OF 19
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	FLOOR WINDOW CLOSE-OUT KIT	NTS
DATE	15.01.12	COPYRIGHT © 2012 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

REFERENCE ONLY

2.0 Parts List

Qty -141	Qty -143	Qty -145	Part Number	Description
X			D350-567-141	FLOOR WINDOW CLOSE-OUT KIT (REGULAR SEATS)
	X		D350-567-143	FLOOR WINDOW CLOSE-OUT KIT (ENERGY ATTENUATING SEATS)
		X	D350-567-145	FLOOR WINDOW CLOSE-OUT KIT (AS 350 B3e)
1	1	1	D3802-1-024	SEAL (24")
1	1		D4434-041	FWD BRACKET ASSEMBLY
1	1		D4434-047	COVER ASSEMBLY
1			D4435-045	T/R BELLCRANK COVER ASSEMBLY
2	2	2	D4435-9	BRACKET
1	1	1	D4436-041	AFT BRACKET ASSEMBLY
1	1	1	D4441-1-240	RUBBER SEAL (24")
		1	D4730-020-030	VELCRO STRIP
	1	1	D4971-041	T/R BELLCRANK COVER ASSEMBLY
		1	D5076-041	FWD BRACKET ASSEMBLY
7	5	5	AN3-3A	BOLT
2	2	2	AN525-10R6	SCREW
2	2	2	AN525-832R7	SCREW
		1	CB 200	3.5g ACRYLIC ADHESIVE
7	7	7	MS21042L06	NUT (OR MS21042-06)
2	2	2	MS21042L08	NUT (OR MS21042-08)
5	5	5	MS21042L3	NUT (OR MS21042-3)
2	2	2	MS21059L3	NUTPLATE
7	7	7	MS35206-229	SCREW
12	10	10	NAS1149F0332P	WASHER (AN960-10L)
14	14	14	NAS1149FN616P	WASHER (OR AN960-6L)
2	2	2	NAS1149FN816P	WASHER (OR AN960-8L)

3.0 Weight and Balance

The following is the net weight increase associated with the D350-567-141/-143/-145 Kits.

Installation	Weight	LATERAL		LONGITUDINAL	
		Arm	Moment	Arm	Moment
D350-567-141/-143/-145 Floor Window Close-out Kit	3.9 lb 1.77 kg	17.9 in 0.45 m	69.8 in-lb 0.80 m-kG	65.5 in 1.66 m	255.5 in-lb 2.94 m-kG

4.0 Installation Procedure

Notes:

- Figure 2 shows the general arrangement and installation of the D350-567-141/-143/-145 Close-out Kits. The procedure that follows outlines the step-by-step procedures for installing the kit with reference photos from the initial installation.
- In conjunction with this modification, it is acceptable to remove the interior floor windows as applicable. Note that the structural reinforcement around the window opening is still required.
 D350-567-115 - OK to remove D3295-041
 D350-567-031 - OK to remove D3212-1
 D350-567-011 - OK to remove D2214
 D350-567-021 - OK to remove D2951
- It is acceptable to drill/trim the D350-567-141/-143/-145 Close-out Kits as required to improve fit.

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED

BY: *[Signature]*
D. SHEPHERD (DE # 02)

DATE: 15.01.12
CERT. NO.: SH92-18
ISSUE NO.: 6

DESIGN	RF	DART AEROSPACE LTD	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. F
MFG. APPR.	N/A	DSI 9590	SHEET 2 OF 19
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	FLOOR WINDOW CLOSE-OUT KIT	NTS
DATE 15.01.12		COPYRIGHT © 2012 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	